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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,083	06/25/2001	Hisaki Miyamoto	P20983	8590

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/887,083

Applicant(s)

MIYAMOTO ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-8, 14-17 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 14-17 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan '242

2) **Claims 1, 3, 4, 6, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '242 (JP 61-292242) in view of Japan '137 (JP 63-213137) and Europe '178 (EP 706178).**

Japan '242, Japan '137 and Europe '178 are applied as in paragraph 4 of the last office action (paragraph 4 of the last office action is incorporated herein by reference).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that Japan '242 does not disclose or suggest any elements movable in the radial direction. Applicant is incorrect. Japan '242's three measuring terminals ("pins") 4 are movable in the radial direction since the three measuring terminals ("pins") 4 are spread so that they are allowed to contact respectively with the inner circumference edge of the annular substrate 1. Movement toward the perimeter of a circle (inner edge of center circular hole of substrate 1) is radial movement.

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Applicant argues that Japan '137 does not disclose a centerer comprising at least two contact pins and an air source that supplies air pressure to the centerer to extend the at least two pins. The examiner disagrees. Japan '137 teaches supplying air from an air source to an air cylinder 3 to raise the pin 4, which moves the lugs ("pins") 6 in the radial direction of an optical disk substrate 8. The claimed "air source that supplies air pressure to the centerer to extend the at least two contact pins" reads on the air source for the air cylinder 3 for moving the pin 4, which moves the lugs ("pins") 6 in the radial direction of an optical disk substrate 8. Claim 1 reads on and fails to exclude the use of a "pin 4" between the claimed air source and the claimed contact pins. Claim 1 fails to require an air cylinder to *directly* move contact pins. The examiner acknowledges that applicant discloses patentable subject matter regarding the specific structure of the centerer. See below for indication of allowable subject matter.

Applicant argues that Japan '137 does not disclose supplying air pressure to extend at least two contact pins (page 11 lines 9-11). This argument is not commensurate with the claims and is therefore not persuasive. Claim 1 broadly requires "air source that supplies air pressure to the centerer" (emphasis added) *instead of* --air source for supplying air pressure to the at least two contact pins--.

Applicant argues that Japan '137 does not disclose a second substrate. This argument is not persuasive since (1) apparatus claim 1 fails to require a second substrate and (2) Japan '242 and Japan '137 share the common subject matter of radially moving three "pins" to contact the inner circumference of a hole in a substrate

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and thereby position the substrate. In view of this common subject matter, Japan '137's teachings as to the use of an air cylinder to move pins is applicable to Japan '242.

With respect to Europe '178, applicant argues that Europe '178 fails to disclose a centering device. More properly, each of Japan '242 and Japan '137 disclose a centering device.

As to claim 22, this claim fails to require pin structure different from that suggested by Japan '242. Japan '242's apparatus is *capable* of aligning two substrates such as two superimposed substrates having a total thickness equal to substrate 1.

As to claim 24, it would have been obvious to configure the pins as claimed in view of the suggestion from Japan '242 and Japan '137 to use three radially movable "pins" to position a substrate.

Europe '178

**3) Claims 1, 3, 4, 6, 14, 16 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 (EP 706178) in view of Japan '242 (JP 61-292242), Japan '137 (JP 63-213137) and at least one of Japan '234 (JP 4-57234) and Japan '629 (JP 62-124629).**

Europe '178, Japan '242, Japan '137, Japan '234 and Japan '629 are applied as in paragraph 5 of the last office action (paragraph 5 of the last office action is incorporated herein by reference).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the 103 rejection is improper for failing to provide at least one the following: motivation, convincing line of reasoning, and implied / express suggestion in the references. The examiner disagrees. Applicant's attention is directed to the following discussion:

Europe '178 discloses a well known laminated optical disc manufacturing process / apparatus. Japan 242 motivates one of ordinary skill in the art to use a centerer having radially movable contact pins in the well known laminated optical disc manufacturing process / apparatus so that the holes of disc substrates to be laminated are aligned. What should be used to obtain the radial movement described by Japan '242? Answer: An air cylinder. See Japan '137. How many disc substrates should be centered at one time? Answer: Two instead of one. See at least one of Japan '234 and Japan '629. No unexpected results over the applied prior art has been shown.

See page 6 of the last office action dated 8-4-04.

Applicant argues that the references fail to disclose a centerer comprising at least two contact pins and an air source that supplies air pressure to the center to extend the at least two contact pins. This argument is not persuasive. All of the secondary references teach a centerer to position a substrate for a disc. Japan '137, Japan '242 and Japan '234 specifically teach using radially movable pins in the centerer to position a substrate for an optical disc. Japan '137 motivates one of ordinary skill in the art to use a centerer in Europe '178's process since Japan '242, which like Europe '178 joins substrates to make a laminated optical disc, suggests using a centerer to align the substrates to prevent eccentricity. What should be used to obtain the radial movement of the "pins" described by Japan '242? Answer: An air cylinder. See Japan

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'137. How many disc substrates should be centered at one time? Answer: Two instead of one. See at least one of Japan '234 and Japan '629. The examiner acknowledges that applicant discloses patentable subject matter regarding the specific structure of the centerer. See below for indication of allowable subject matter.

Applicant argues that Japan '242 does not disclose any radial movement.

Applicant is incorrect. Japan '242's three measuring terminals ("pins") 4 are movable in the radial direction since the three measuring terminals ("pins") 4 are spread so that they are allowed to contact respectively with the inner circumference edge of the annular substrate 1. Movement toward the perimeter of a circle (inner edge of center circular hole of substrate 1) is radial movement.

Applicant argues that Japan '137 does not disclose a centerer comprising at least two contact pins and an air source that supplies air pressure to the centerer to extend the at least two pins. The examiner disagrees. Japan '137 teaches supplying air from an air source to an air cylinder 3 to raise the pin 4, which moves the lugs ("pins") 6 in the radial direction of an optical disk substrate 8. The claimed "air source that supplies air pressure to the centerer to extend the at least two contact pins" reads on the air source for the air cylinder 3 for moving the pin 4, which moves the lugs ("pins") 6 in the radial direction of an optical disk substrate 8. Claim 1 reads on and fails to exclude the use of a "pin 4" between the claimed air source and the claimed contact pins. Claim 1 fails to require an air cylinder to *directly* move contact pins. The examiner acknowledges that applicant discloses patentable subject matter regarding the specific structure of the centerer. See below for indication of allowable subject matter.

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Applicant's arguments reading Japan '234 and Japan '629 are not persuasive since Japan '234 and Japan '629 provide ample suggestion to contact two substrates to simultaneously position and thereby align the substrates.

Applicant argues that if Europe '178 was modified to have the positioning jigs 6, 8, and shafts 18,20 of Japan '234 top center the substrates, the resulting configuration might damage due to the pressure of the upper jig 6. No such modification is being made.

As to the new claims 22-25: As to claims 22 and 23, note Japan '242's suggestion to position and align two substrates (albeit one at a time) using contact "pins" and the suggestion from at least one of Japan '234 and Japan '629 to simultaneously contact the inner circumferential edges of two substrates so that both substrates can be positioned and aligned at the same time; the self evident benefit being the reduction of the number of steps. As to claims 24 and 25, it would have been obvious to provide the pins such that a longitudinal axis of each contact pin extends substantially parallel to a thickness of the substrates in view of the suggestion from at least Japan '242 and Japan '137 to use "contact pins" to position a substrate. Japan '234 also teaches using "contact pins" (18, 20) to position a substrate, and more specifically, two substrates wherein the contact pins clearly have a longitudinal axis.

**4) Claims 2, 7, 8, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 in view of Japan '242, Japan '137 and at least one of Japan '234 and Japan '629 as applied above and further in view of Japan '630 (JP 4-139630).**



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Japan '630 is applied as in paragraph 6 of the last office action (paragraph 6 of the last office action is incorporated herein by reference).

5) **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 in view of Japan '242, Japan '137 and at least one of Japan '234 and Japan '629 as applied above and further in view of Komori et al (US 5227213).**

Komori et al is applied as in paragraph 7 of the last office action (paragraph 7 of the last office action is incorporated herein by reference).

6) **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '178 in view of Japan '242, Japan '137 and at least one of Japan '234 and Japan '629 as applied above and further in view of Japan '786 (JP 8-36786).**

Japan '786 is applied as in paragraph 8 of the last office action (paragraph 8 of the last office action is incorporated herein by reference).

#### **Allowable Subject Matter**

7) **Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

New claims 20 and 21 are supported by original figure 10, which illustrates two pins and two air cylinders 40 such that an air cylinder 40 is coupled to each pin 39. The prior art of record fails to suggest the addition limitation of either claim 20 or claim 21. It is emphasized that Japan '137 teaches only one air cylinder for three pins 6 instead of three air cylinders for the three pins such that an air cylinder is coupled to each pin

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Remarks

8) Applicant's arguments with respect to claims 22-25 have been considered but are moot in view of the new ground(s) of rejection.

As to claims 1-4, 6-8 and 14-17, applicant's arguments filed 11-4-04 have been fully considered but they are not persuasive.

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

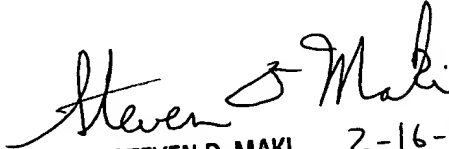
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
February 16, 2005

  
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2-16-05